DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012827 Address: 333 Burma Road **Date Inspected:** 21-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:**

Summary of Items Observed:

On this day Caltrans OSM Quality Assurance (QA) Inspector Daniel Barrentine was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port

Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China.

This inspector witnessed the following work in progress:

Flux Cored Arc Welding (FCAW) of 20TR1-032; Weld 003. Welder is identified as 219188. ZPMC Quality Control (QC) was identified as Xiang Feng Feng. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-Tc-U5-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of 20TR1-027; Weld 007. Welder is identified as 250672. ZPMC Quality Control (QC) was identified as Xiang Feng Feng. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-Tc-U5-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of 20TR1-035; Weld 003. Welder is identified as 215397. ZPMC Quality Control (QC) was identified as Xiang Feng Feng. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-Tc-U5-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of 20TR1-040; Weld 011. Welder is identified as 059450. ZPMC Quality Control (QC) was identified as Xiang Feng Feng. Weld Procedure Specification (WPS) is identified as

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WPS-B-T-2231-Tc-U5-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of 20TR2-034; Weld 013. Welder is identified as 216872. ZPMC Quality Control (QC) was identified as Xiang Feng Feng. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-Tc-U5-F. Welding appears to conform to the requirements of the WPS used.

Heat Straightening was observed pursuant to HSR1 (B)- 8160 on traveler rails 10TR1-004 and 11TR1-026. All variables of the HSR appeared to be in general compliance.

Flame cutting of weld preps to various floor beam plates for the lift 13 mock ups was observed.

Repair welding of 11TR3-003 pursuant to B-CWR 1100. The welder was identified as 048625. The welding procedure was identified as WPS-345-FCAW-1G (1F)-Repair-1. All work appeared to comply with the WPS and the contract documents.

Repair welding of 11TR8-002-014 pursuant to B- CWR 11010. The welder was identified as 054460. The welding procedure was identified as WPS-345-FCAW-1G (1F)-Repair-1. All work appeared to comply with the WPS and the contract documents.

This inspector witnessed conventional ultrasonic inspections, UT, by ZPMC personnel on 21TR4-002. Indications were noted at the time of inspection and were documented by ZPMC. Areas for repair were marked directly on the weld.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

| Inspected By: | Barrentine, Daniel | Quality Assurance Inspector |
|----------------------|--------------------|-----------------------------|
| Reviewed By: | Carreon, Albert | QA Reviewer |